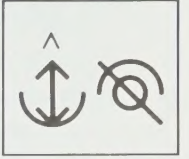


COMMUNICATING TOGETHER



A QUARTERLY MAGAZINE ABOUT AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

VOLUME 5, NUMBER 2

JUNE 1987



CONTENTS

3	WHITE'S GESTURAL SYSTEM FOR LOWER EXTREMITIES	MARY BLAKE HUER
	FAMILY AND COMMUNITY	
5	Reflections	ANDREW MURPHY
6	"Bridging the Gap" — from Gestures to First Words Using Signed Communication	SUSAN GLAZER, ANNICK ROUSTAN NANCY BURBRIDGE
7	Alison	FIONA WOOD
	INTERNATIONAL NEWS	
8	Ten Years with Blissymbols in Sweden	KARIN GUTTMAN
8	Elementary Blissymbol Workshop for Parents	JUDY SELIGMAN-WINE
	AUGMENTATIVE COMMUNICATION	
9	Assessing Functional Communication in Augmented Communicators	ALISON MACDONALD
	MACHINES, COMPUTERS AND THINGS	
11	Blowing Off Steam in Hopes of Being of a Little Assistance	MARY ANN MERCHEN
	BLISSYMBOL TALK	
12	Hamilton-Wentworth Blissymbol Narratives for Children's Story Books	
13	Flowers	FRANCESCA HELLER VANICHER
	THE PARAPHRASE	
14	Technology for the Disabled	CATHY FAIRLEY
	PERSPECTIVE	
15	Not Quite According to Plan	BARBARA REID
	TEACHING AND LEARNING	
18	A Visit to a Total Communication Class	CLAUDIA WOOD
	RESEARCH AND PUBLICATIONS	
20	Mobility and Employment, A Report on Two Conferences	GEB VERBURG
22	SCHEDULE OF EVENTS	



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WHITE'S GESTURAL SYSTEM FOR LOWER EXTREMITIES

MARY BLAKE HUER

Mary Blake Huer is currently an Assistant Professor in Communicative Disorders at the University of Wisconsin-Whitewater. She holds a Ph.D. degree from Indiana University, has presented internationally and nationally on the topic of augmentative and alternative communication, and is the author of The Nonspeech Test for Receptive/Expressive Language. She worked with the multiply-handicapped population in the public schools for five years before returning to the university to teach and conduct research.

It is my pleasure to introduce Catherine H. White, a seventeen-year-old nonspeaking individual whom I met in December of 1985. My augmentative and alternative communication class went on a field trip to McLenegan school in Beloit, Wisconsin to observe a program for the multiply physically handicapped, and although there were approximately ten students whom we observed in the classroom, Cathy White stood out as someone very special because of her unique system for communication. Cathy communicates through "leg signs", a lower extremity gestural system which she, her mother, her classroom teacher, and speech-language pathologist continue to develop. Since Cathy has a severe hearing loss and athetoid, spastic cerebral palsy with severe upper extremity involvement, she lip reads during conversations and uses her "legs" to talk. Because of the upper extremity involvement, Cathy cannot hold her head up, nor can she use her arms and hands for communication as do other hearing impaired individuals.

A Supportive Family Makes the Difference

According to Cathy's mother, Harriet White, the development of the present gestural system began as early as age four when Cathy had her hearing tested. She was instructed to raise one leg if she

heard a sound, or to raise the other leg when she did not hear a sound. Her gestural system began to develop after that with "leg signs" for colours, "yes", and "no", and for her name, "Cathy". She signed during nursery rhymes with her mother. The telling of nursery stories facilitated development of her lip-reading skill. Mrs. White believes that Cathy learned to lip read when she was held as an infant. Because of the positioning of Cathy's head when held, and given the closeness of her mother's lips to her eyes, Cathy learned to lip read so well that her severe hearing loss was not discovered until age four when her hearing was tested.

As the seventh child of Philip and Harriet White, she always received great encouragement, love and support as a family member. By the age of five, she was beginning to "create" her own signs. The first sign she invented was the sign for "big" (legs open wide). During the past ten years she has helped her mother develop a "leg sign" system by indicating her needs, likes and dislikes. Mrs. White reports that she always asked herself, "What can we do next? What haven't we used?". These questions, plus Cathy's motivation, have resulted in the development of White's Gestural System for Lower Extremities, a unique system for approximately 125 "leg signs" for communication. Vocabulary within this system continues to be created by Cathy weekly.

Cathy's "leg sign" system includes signs which require from one to five body movements/positions per sign. Most of the signs require only one or two movements per sign. The sign vocabulary requires approximately thirty-four leg, twenty foot, thirty-three toe, twenty-six heel, sixteen knee, nineteen ankle, eight calf, and seven thigh touch points of movements/positions. For example, "how" is signalled by the right heel on the left knee plus a scratch of the left calf with the right toes. The linguistic categories introduced within Cathy's sign system include people, actions, objects,

questions, attributes, yes/no, places, comments, and animals. If one watches Cathy's interactions with her mom, her classroom teacher, and speech-language pathologist, one cannot help but be amazed at the consistency with which Cathy produces each sign in her unique system. The reliability of her signing a set of one-hundred signs across three different listeners and in two different positions is greater than ninety-five per cent consistent.

Cathy Is a Teacher

Cathy is following in her father's footsteps. Philip White is a teacher at the Beloit Memorial High School. Cathy too, is a teacher. Daily she teaches her classroom teacher, Nancy Glass, what she can do. Her teacher describes her as a workaholic who gives 110 percent, and who rarely gets discouraged. The school was persuaded to purchase a computer system for Cathy's use in the classroom. Her parents also purchased a computer for their home. These purchases allowed Cathy to teach her speech-language pathologist, Debra Brossard, about her developing need for speech for communication. Debra Brossard and her husband,



Cathy White leg signing "I don't know".

Richard Brossard, have recently developed a computer program for Cathy's speech as well as for academics in the classroom. Cathy's system includes an Apple IIe computer with 128K of memory, a power pad from Chalkboard, Inc., two monitors, necessary due to her poor head control, an Echo Plus synthesizer and amplifier, and Electronic Communication Board software and other software adapted by the Brossards. The Brossards report that they would not have developed the unique software programs for Cathy if it were not for her motivation and determination.

Cathy also continues to teach me as well as my students. The research of her "leg sign" system, vocabulary development, and interaction strategies with changing partners has been invaluable to my graduate level augmentative communication seminars. It is obvious that every person with whom Cathy interacts is taught something very special. As one interacts with Cathy, one sees her joy, motivation, excitement and dedication. Cathy is a lover of people.

This is reflected in the thirty-seven plus people signs in her "leg sign" vocabulary.

Cathy's mother has a rich collection of wonderful stories from Cathy's experiences, documented in several scrapbooks. Her mother's dedication and love of Cathy are reflected through Cathy's life story. Such provides a source of courage, information and hope for other mothers. Mrs. White expressed a particular desire during our first meeting when I asked for permission to videotape and document Cathy's "leg sign" system. She hoped that Cathy could be proud of her accomplishments, and that she could do something significant as had all the other siblings in the family. Cathy is following in her family's tradition. Cathy's success has already been realized in a videotape of her unique system for communication which was presented at the ISAAC Conference in Cardiff, Wales, at the American Speech-Language-Hearing Association Meeting in Detroit, Michigan and at the Wisconsin Speech-Language-Hearing Associa-

tion Meeting in Delevan, Wisconsin. Her case, when well documented, will provide professionals with a further understanding of the communication process itself. Her contributions to the field of augmentative communication are sources of information regarding idiosyncratic gestural systems, interaction strategies with changing partners, and treatment ideas for persons having control of only their lower extremities for communication. She is another sharing member of the diverse population of nonspeaking individuals currently utilizing multi-modal communication systems. She will continue to contribute as she advances her studies with her teacher and speech-language pathologist. Documenting Cathy's story is sheer joy. How exciting it will be in the future to watch Cathy go! □

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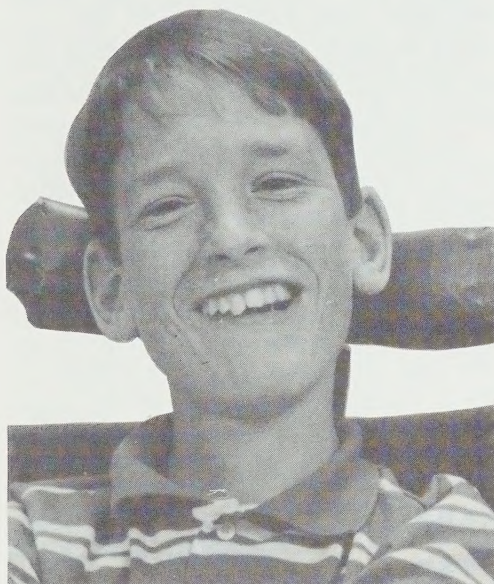
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Reflections

ANDREW AND MARK MURPHY



Andrew Murphy has been the editor of the Family and Community Section of *Communicating Together* since the magazine began in 1982. A Blissymbol user for many years, he now uses the Mod Keyboard for written communication. Last year Andrew and his family moved to Florida, but he was anxious to continue his association with us. Writing with the help of his father Mark, he shares his perspective with readers, and includes the stories and experiences of other augmentative communication families.

I just celebrated my nineteenth birthday. It was a good time to think back about how my ability to communicate has changed over the years. At the beginning, the fact that I could not speak made communicating very difficult and frustrating. It was a guessing game. People, mostly my parents, had to guess what I was thinking, and I had to react in a positive or negative manner to let them know if they were on the right track. Thankfully, Blissymbols were discovered, and I started using them back in 1974. I hate to think what would have happened if they had not been available.

My experience with Blissymbols has been very positive, and I was able to grow along with the system and develop a full range of communication abilities. This allowed

me to participate in and enjoy life a lot more.

Now when I look at my board, I see that there are no longer Blissymbols on it. It is completely filled with words and with the alphabet and numerals. We update the words on the board periodically, and this gives me a chance to communicate effectively with those people who take the time to interact with me. The fact that there are words on the board makes it easier for other people and now that my spelling and reading are improving, it is rewarding for me. As I improve my ability to communicate in the English language, it makes the difference between me and other people less, and I hope will encourage more people to try to communicate with me.

My development happened because so many people were interested and took time to develop the systems to help me. Their efforts have also helped many others. Following is a letter from Michael Zuk who is thirteen years old and is nonspeaking and cerebral palsied. Since he was five years old, Michael has been using different communication aids. He now has the TS-80 computer at home and uses this along with aids borrowed from the Technical Resource Centre in Calgary. Anna Farcas, who is a speech-language pathologist, sent his letter to be shared with *Communicating Together* readers.

* * *

Dear Friends:

My name is Michael Zuk. I go to school at Dr. Gordon Townsend School at the Alberta Children's Hospital in Calgary, Alberta. I'm nonspeaking. I'm writing about the Epson, Speech Pac.

When I got the Epson, Speech Pac, it was great! It had a voice and a keyboard. I know the keyboard well. It also has a LCD screen, a micro-cassette drive and a tiny printer. Four ways of communicating!

At first, mom didn't understand it very well. Then, after she got used to the voice, she understood it just like it was my normal voice and

she called me "chatterbox". I have never had so many ways of communicating with just one machine. It's powered by rechargeable batteries and it is light. I can carry it on my wheelchair. I like the Epson, Speech Pac, a lot.

Sincerely,
Michael Zuk

* * *

I was able to visit the Gordon Townsend School when I was in Calgary a few years ago. I met some wonderful people there. Students are very fortunate to have such a centre that gives them the opportunity to develop their skills. I am planning to visit Calgary in 1988 and hopefully, will be able to meet Michael and learn more about his system and experiences. □

Editor's Note:

We are very sorry to report that this is the last regular column that Andrew will be writing for *Communicating Together*. A heavier workload at school, and the problems of keeping in close touch since his move to Florida, have made it difficult to fulfill a quarterly writing commitment. We have accepted Andrew's resignation with great regret.

On behalf of all our readers we thank you, Andrew for five dedicated years. Many of our readers have told us that your column is the one they turn to first when a new issue arrives. We all wish you great success in future endeavors.

**This section of
Communicating Together
is sponsored by
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"Bridging the Gap" — from Gestures to First Words Using Signed Communication

SUSAN GLAZER, ANNICK ROUSTAN,
NANCY BURBIDGE

Susan Glazer and Annick Roustan are Speech-Language Pathologists. Nancy Burbidge is a Social Worker. All work at Child Development Service, a clinic in the Children's Hospital of Eastern Ontario in Ottawa, Canada.

They are part of a multidisciplinary team involved in assisting families with children who are developmentally delayed, providing assessment, treatment and counselling for the child and family.

The team sees children of all ages but focusses primarily on the preschool child. Ms. Glazer, Ms. Roustan and Ms. Burbidge wrote the following account of a parents' group with which they are involved.

"Signed Communication" is the name of a parent program which has been developed and used at Child Development Service in the Children's Hospital of Eastern Ontario, Ottawa, Canada. As Speech-Language Pathologists involved with developmentally delayed children from the time they are about one year old, we are always looking for strategies to improve their communication ability. It has become more and more apparent that these children, as young as eighteen months old, benefit from a total communication environment where sign and speech are used simultaneously. The use of sign language with developmentally delayed children is not a new concept. In the past ten to fifteen years, it has been successfully introduced to autistic children and mentally retarded children.

In our program, parents meet for a series of seven group sessions which are coordinated by a speech-language pathologist and a social worker. Our objective is to promote better interaction between parents and their young children by developing the parents' ability to teach and use sign language. In these sessions we discuss infant communication, language stimulation techniques, sign language and view videotapes of parents and children using sign. One of the most important elements of the program is to provide parents

with an open forum to express their feelings about signed communication. They are asked to bring their children and extended family members to two of the sessions where there is a hands-on demonstration of signing during play and snack time.

Parents Express Concerns about Signing

When we first meet parents of children who are developmentally delayed, we notice that they all subscribe to a number of myths and misconceptions about sign language. Many of them also show their fear, sadness, confusion and even anger at being asked to use an alternate form of communication.

They are afraid that signed communication will make them and their children appear different from other families in the community. This fear is justified. Signing does represent a very visible manifestation of a child's disability. Families need time first to come to grips with the diagnosis of developmental delay and then to adjust to the idea of using sign language.

Parents also worry about losing control over their natural ability to teach their children basic communication skills. They feel that it would be difficult to learn and even more difficult to teach it to their children. "At first, I thought he would be confused because he was used to hearing me talk only and would not pay attention to my hands". "It was a shock to realize that it was in my family now".

Families soon realize that using signed communication is not that

difficult because they do not have to change the way they talk to their children. The only demand on family and friends is that they learn a basic sign vocabulary; about fifty to a hundred signs. Signing is introduced as an extension of the child's natural gesture system of reaching or pointing towards a desired toy. Not only does signing allow the child to name an object but also to go one step further and ask for it when it is not in sight.

We find that it is easier for the child to control the muscles of the hands required for signing than the muscles of the tongue, lips, jaw and cheeks required for talking. Children find it easier to remember and produce movement that they can see and feel than to try to match their vocalizations to a fleeting word. We can actually help them formulate the sign by manipulating their hands. This is not possible to do with sounds or words. The question that is always asked is whether signing will delay or prevent a child from talking.

Most people think that if signing is an easy way to communication then once a child learns it, he will not make any effort to use his voice for talking. However, signing actually facilitates the learning of speech. We have observed that when children use sign language they make more attempts to vocalize and use word approximations. With practice, these vocalizations become more and more consistent and are soon able to stand alone. Once consistent verbal forms appear and are readily understood, the children naturally reduce their use of signs.



more



cookie

Signs Can Help Clarify the Meaning of Vocalizations

Parents are worried that if their children use sign with other children, they will not be understood and it will be harder for them to make friends, thereby creating even more distance between their child and the community. In fact, when the developmentally delayed child attempts to vocalize and use word approximations he is often not understood even by close family members, let alone friends in the community. Signed communication helps a family escape from the frustration of reduced intelligibility in the spoken attempts of their child. A child who says "duh" may use this word approximation for "daddy", "dog", "doll" or even "that". Parents could find it difficult to decide which of these words their child means. An accompanying sign clarifies the meaning. Parents are not confused if, when the child says "duh" he uses the sign for "dog" simultaneously. "Seeing the frustration our child was going through, I knew we needed something. She was unable to tell us if she wanted a glass of water or a cookie so we had to guess all the time. Now she is able to communicate her basic needs". "He is now combining signs to form simple sentences. He uses more and more sounds, but they still don't make sense to an untrained ear. We will keep working at increasing his sign vocabulary".

By the end of the seven sessions, which span a period of four months, parents feel strongly about the advantages of both group discussion and the experience of hands-on demonstrations of signing. Parents express their relief at understanding why signed communication was introduced to their family and how they can use it successfully with their children. They see their children change over four months, growing in self esteem and independence. "I understand now that signing was important to help bridge the gap. I could see the results immediately". "Every time she learns a new sign it is a victory. Something to build on. We are not left with a child who cannot express herself. It's a relief. A big relief". □

Alison

FIONA WOOD

Alison is my mentally retarded sister. She grows like the building blocks with which she plays: one piece at a time.

She didn't breathe
when she was born
Why ...
Is it because
she was unfortunate?

She's learning
but it takes time
Why ...
Is it because
she needs to be helped?

To her
it's frustrating
Why ...
Is it because
she can't speak with words?

She speaks
but with her hands
Why ...
Is it because
it's the only way?

She's fifteen
but is still eight
Why ...
Is it because
she's just a bit slow?

She's looked at
by the curious others
Why ...
Is it because
she's a little different?

She's loving
Arms out to all
Why ...
Is it because
it's her nature?

She's loved
by one and all
Why ...
Is it because
she earns this love?

She's ours
and we love her
Why ...
It is because
she's very special.



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Ten Years with Blissymbols in Sweden

KARIN GUTTMAN



Karin Guttman is an elementary special education teacher at Bräcke östergård in Göteborg, Sweden. She has been working with Blissymbol users for many years, and has arranged pen pals for several of her students, with students in England, Canada and the United States. Some of the pen pals from England even visited their friends in Sweden in 1984. Ms. Guttman sent the following account of the 10th anniversary celebration of Blissymbols in Sweden.

On the 29th of September 1986 we celebrated ten years of Blissymbols in Sweden, with a meeting at Dahlheimers House, a hotel for handicapped persons in Göteborg. The day began with giant birthday cakes shared by over 150 people, thirty-five of whom were Blissymbol users. In the evening there was a dinner at Bräcke östergård institution.

We had the pleasure of having Shirley McNaughton with us during the day-long celebration. She gave a speech telling us about Blissymbol developments over the years, illustrating her talk with some slides. Then she told us what she is looking forward to in the future.

Two of my former pupils, Edde Piper and Anette Nilsson, both now seventeen years old, gave their view of what Blissymbols had

meant to them. They also sang a lovely song together with their music teacher. The song says that before they knew Blissymbols they lived in a world of "yes" and "no", but when they got Blissymbols they could ask questions and do the talking themselves.

I gave a speech where I told a little about what has happened in school during these past years. I also showed some slides from the past years. Following my presentation, several other children and parents talked about how Blissymbols had altered their lives.

Blissymbols started here in 1976 when Shirley McNaughton held the first course in Sweden. At first we had a rather rough time as people were suspicious about Blissymbols and we had to inform them about the system. Now, Blissymbolics is the most common form of alternative communication at our institution, and at many other places in Sweden too. Some of our children have their lessons at two common (integrated) schools in Göteborg. This has meant that many of their speaking schoolmates have learned a little about Blissymbols.

Our dinner together provided lots of time for seeing and speaking to old friends. We all enjoyed this relaxed time together with music, games and good fellowship.

The Swedish Blissymbolic Association was responsible for planning this celebration. □



Britt Carlson presents a rose to an early Blissymbol user.

Elementary Blissymbol Workshops for Parents

JUDY SELIGMAN-WINE

Judy Seligman-Wine, a speech-language pathologist has been actively involved in augmentative communication for many years. An original member of the Blissymbol team at the Ontario Crippled Children's Centre in Toronto, Canada, she continued her interest in Blissymbols after emigrating to Israel in 1974, setting up programs and giving workshops throughout the country.

Over the past few years I have given numerous Blissymbol elementary workshops as well as Blissymbol up-dates in Israel. I have always tried to include parents in these workshops in the belief that parents are vital members of the child's augmentative communication team. Indeed their inclusion right from the outset is often one of the deciding factors in the success of their child's program. They hold the key to unflood the dyke of information which their child wishes to communicate.

Based on requests from parents for courses of a different format which would allow for their participation, I decided to experiment with a workshop designed specifically for parents. To date, I have given two workshops of this nature. They were slightly shorter in length than the regular elementary workshops and were presented over a longer period of time — in the evenings for three hours, once a week over a ten week period. Although the content was basically the same as that of an elementary workshop, the emphasis was slightly different. Less time was spent on aspects of assessment, although I think it is very important for parents to know the factors involved in deciding to offer their child an augmentative communication system. A great deal of time was spent on the pragmatic aspect: how to communicate with a child using a Blissymbol chart; how to encourage communication from a child; what to expect from that child; how to include the communication chart in

all aspects of family life.

During the parents' workshop, much emphasis was placed on the parents' role in the preparation of communication charts and other materials. One complete session was devoted to making toys incorporating Blissymbols, with parents actually making games for use at home. We also talked a great deal about the preparation of communication charts; we have found it most expedient for children to have duplicate Blissymbol boards, one for school and one for home. Because of the time factor involved in the preparation of a communication chart, we have found it helpful to ask parents to prepare the chart to be used at home (using the other as a model). This has been successful because of the satisfaction gained by the parents from contributing to their child's program and as well, because of the added care they then give to the communication charts (knowing the time necessary to construct one).

The two workshops for parents which I have presented to date met with a lot of enthusiasm and interest on the part of the parents and were judged to be successful undertakings. However, I should point out some of the problems which I encountered in these two ventures. The first workshop was given at my place of work. I was acquainted with all the children and their

parents prior to the workshop; in all cases I was either the therapist directly responsible for the implementation of the child's augmentative communication program or the supervisor of the responsible therapist. While the workshop provided an excellent opportunity for contact between the different sets of parents, there was the problem of comparisons between children, all of whom presented different levels of cognitive and communicative ability. It became my role to balance the situation between raising undue expectations on the part of some parents and causing frustration and disappointment for others.

The second workshop came about as the result of pressure from parents and therapists living in a city about forty miles from my home in Jerusalem. On this occasion I was unacquainted with the children prior to the workshop. This led to many problems in dealing with the parents' questions regarding their children. I was not the therapist responsible for the child's program and in many cases the parents found discrepancies between my approach and that of the therapist working with the child. This caused some uncomfortable situations which had to be dealt with diplomatically so as not to undermine the position of the child's therapist. Should I undertake another workshop of this nature in the future, I

would make it a prerequisite that I be acquainted with each of the children before beginning the workshop.

Purely by chance, the parents in the first workshop were fairly homogeneous in terms of educational and socio-economic background. In the second workshop, the parents represented a very diverse range of backgrounds and their concerns and needs varied greatly. At times I felt the responsibility on me as the presenter in this workshop to be overwhelming.

Overall, I feel that the concept of parent workshops is an important one. While the presenter is challenged with many difficulties and obstacles, the outcome is well worth it. With knowledge and appreciation of the process, parents show more willingness and desire to be involved. The opportunity for contact between parents is vitally important — in some cases this led to ongoing friendships and visits between the children themselves. Most important, the experience gave me a deeper insight into the needs, concerns and frustrations of the parents and provided me with the opportunity of addressing these needs more specifically and individually. I hope to repeat workshops of this nature in the future; my goal will be to include siblings in them whenever possible. □

AUGMENTATIVE COMMUNICATION

Assessing Functional Communication in Augmented Communicators

ALISON MACDONALD

Alison MacDonald is a Senior Therapist with the Scottish Council for Spastics and also a Clinical Supervisor of Undergraduate Speech Therapy students at Queen Margaret College, Clerwood Terrace, Edinburgh, Scotland.

She is Chairman of the Blissymbolics Communication Resource Centre (U.K.).

Three dimensions of language have been described by Bloom and Lahey (1978) — form, content and use.

Form refers to the structure of the language, the use of grammatical rules concerned with word order and the ways in which for example tenses and plurals are signalled. This can be easily studied in aided communication systems such as Blissymbols by looking at the order and number of symbols the user strings together, at whether he is using verbs and prepositions in addition to nouns and at his ability to use indicators. Content refers to the meaning aspects of communication and this of course is central to a concept based system such as Blissymbolics. The majority of symbols taught come from the pictographic and ideographic categories. Teaching strategies usually evolve

around meaningful use of the symbols and in fact many Bliss users successfully convey the content of their messages without employing the full rules of form expected from an oral communicator. The third dimension, use, concerns the pragmatic or functional aspects of communication, with emphasis on how the communicator functions as a partner in dyadic interaction. Increasing attention is being given to this area and answers are being sought to some of the many questions which arise, for example: How is the nonspeaking communicator coping with breakdown in communication (Calculator and Delaney 1986)? How does the speaking partner know that he is being under-

stood, that he should feel free to continue speaking or that he is being agreed with, in other words what back-channel responses are being given by the nonspeaking partner (Blau, 1983)? Does the augmented communicator have the best linguistic units with which to facilitate interactive communication (Rothschild, 1985)?

Another area that becomes increasingly important as the nonspeaking communicator develops beyond the stage of surface needs communication and into the more complex world of varied language functions, is the need to look at this competence across a range of different communicative contexts. As a practitioner I have frequently felt uncomfortable at any insistence on use of a nonspeaking person's prescribed system being expected or demanded in all speaking situations. Is it appropriate for every Bliss user to break eye-contact and point to "hello" whenever a visitor hoves in sight? Is it necessary for the multiply handicapped child with a relatively functional "yes" to point to a happy face on his picture chart, regardless of appropriateness, in response to every closed question, e.g. "Did John take your biscuit?" "Is your leg sore?"

Searching for Standard Communication Profile Forms

Issues of this sort plus a growing interest in multi-modality communicators prompted a search for some form of assessment of speech acts — different uses to which communication is put, e.g. greeting, requesting, responding. Initially, like many other therapists and teachers, I made up my own profile sheet (MacDonald 1984) however, in an endeavour to standardize my informal assessment I began looking at what had already been produced in the area of functional communication. Most published profiles are aimed at the adult aphasic population (Sarno 1969; Holland 1980) and do not adapt well to the abilities and needs of the congenitally nonspeaking person, but the *Edinburgh Functional Communication Profile* (Skinner 1984) has several useful features. Although designed for use with adults with acquired aphasia, it looks at a spectrum of speech acts or contexts which are equally

appropriate to the nonspeaking communicator — Greeting, Acknowledging, Responding (to closed questions, open questions, object/action requests, seeking information), Propositional (object transfer, initiating conversation) and Problem Solving. A rating scale for each act is provided, from No Response through Inadequate, Adequate, to Elaborate. Finally five modes of response are considered for each speech act — Speech, Gesture, Facial, Vocal and Written. This profile therefore, offers a three-dimensional view of the nonspeaking communicator's functionality.

In order to make effective use of the profile with augmented communicators, it is necessary to adjust the modality definitions slightly. So far I have used the Gesture category to include use of a systematic sign language (e.g. Makaton/BSL) as well as natural gesture, and the Written category to include symbol and picture chart usage. Experience so far, however, has shown that a further subdivision of this final category would be useful. There are, for instance, many advanced chart users who make use of both symbols and orthography. If the alphabet is used simply to extend symbol vocabulary (e.g., ∇ d. for dog) then this would arguably not be a change of modality. One would be seen as an extension of the other, rather than as an available alternative. The chart user, however, who sometimes elects to point to a symbol and at other times elects to spell out the same word (e.g., ∇ or d.o.g.) is more truly alternating between two modalities. If this is so, then it could be helpful to analyze the circumstances in which he chooses one mode rather than the other. The same might also be true for circumstances requiring a more analytical look at the use of ideosyncratic gesture versus manual signing.

Benefits in Documenting Aspects of Communication

There are several benefits in documenting aspects of functional communication in this way, and although so far I have not put my completed profiles to their full use, they might be used:

- As a method of documenting progress as a 'communicator' rather

than simply in terms of syntax sophistication or vocabulary count.

- To record functional use of different communication acts with a view to looking at further vocabulary needs and areas of communication that may require some formal teaching.

- To look at the balance of communication modalities with a view to making more use of under-used channels where feasible.

- To compare communication modalities used in different settings. Does the Bliss user communicate as effectively with his chart at home as at school? Is he making more use of other modalities with his family and if so, how effective are these in different communication acts? What happens to the sign language user in settings where his signs are less easily interpreted? How does he attempt to compensate, if at all?

For all of these uses it is important to be able to 'read' the profile quickly and informatively. By colour-coding the five modalities the appropriate blocks filled in on the profile can be surveyed at a glance.

Finally it should be pointed out that the scoring system is fairly subjective. Colleagues may find that they put slightly different interpretations on their observations. The EFCP is probably most useful in providing working guidelines for an individual clinician or teacher's own use. □

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Blowing Off Steam in Hopes of Being a Little Assistance

MARY ANN MERCHEN

Mary Ann Merchen holds a Bachelor's Degree and hopes in the future to obtain a Master's Degree in Psychology. Her long term goal is to help people like herself through teaching and writing. Miss Merchen has cerebral palsy, and a modest speech impediment. In the following article, Miss Merchen describes some frustrations she is left with after being involved in evaluation of prototype communication equipment.

I have cerebral palsy and have been working with communication aids ever since the Cyber-Type was developed more than fifteen years ago. In addition to using this aid, which had only seven keys and was connected to an adapted I.B.M. typewriter, I was also in a study for about two years to evaluate some prototype communication aids. How did I get to use these devices that were not being sold yet? Well, the school which I attended for twelve years was for handicapped children. This made it a good setting for testing new communication aids.

Feeling Part of a Team

While I was in school, I thought the fact that I was using equipment that was not on the market was great. Now, however, I sometimes wish that I had not had this opportunity. There are two reasons for feeling this way. First, when I was in the studies, the researchers made me feel very important by asking if I thought such and such would improve the next model. They always gave me tests to see if I had gotten faster using the equipment and I looked forward to their visits, (especially since I was in late adolescence and none of the researchers was over twenty-five). They talked to me as an equal, and started a newsletter for the study participants. It meant a great deal to me and made me think they liked us as people, not just as subjects.

When the study was over, I soon felt they had only been motivated by the desire to design something that severely handicapped people could use, without caring too much about the people. The fact that they had established an excellent relationship with me only to forget about it once the study was finished seemed a little unprofessional. Disabled people have to learn that friendships, even good ones, might not last for ever. I did not think of the researchers as close friends, however, I had come to feel that they were professionals with whom I would have an ongoing association. To me, they were like a group of people who ran an organization or had a small business, and I thought of myself as almost a silent partner who would be able to contact the group without feeling as if I was a stranger.

I felt a loss when the study was finished and I no longer had any contact with the people whom I greatly respected. The feeling of abandonment which I felt for a long time would not have existed if the researchers had appeared less interested in my opinions. I might not have felt as though I had helped in the designing of the equipment. And if I had not felt this way, I would have been better off, in the long run.

What Happens When Equipment Is Obsolete

My first reason for occasionally wishing I had not been part of the studies may seem too emotional to be taken seriously, but I think my second reason will make more sense. It is that I have been spoiled by one piece of equipment that was ideal for me, and I do not know where to find a replacement for it now that mine is obsolete. The fact that it cannot be fixed would not be so bad if this aid was still being manufactured.

I know there are centres that do evaluations for communication aids, but I am hesitant about going to one. Some professionals who conduct evaluations do not know enough about the communication

aids they have, to determine which aid is the most beneficial for a particular person. Steven Crissafulli wrote a two part article, that appeared in *Communication Outlook* over a year ago. He discussed my concern of not being able to find a knowledgeable professional to conduct an evaluation.

In addition to fearing that I might know as much as the evaluator, I am also afraid of getting an aid that I really like only to have the company stop manufacturing it. If this happened, I would be right back where I have been for over a year, ever since my last communication aid stopped working. Currently I am using the Unicorn Expanded Keyboard Model. It is very good for its low price, but it does not allow me to use my computer nearly as fast as I could previously.

I did not write this article to complain about some researchers who have done a great deal for severely handicapped people. However, I ask all researchers not to seem too interested in their subjects, especially if they think they will not have time to give to them when their studies are finished. I suggest that the subjects' teachers and/or therapists conduct the interviews and compile comments for suggested improvements. Perhaps, if the researchers themselves did not collect this kind of information directly, the likelihood of subjects getting the wrong idea, as I did, would be less and researchers would still have the opinions from their subjects. □

Editor's Note:

Mary Ann Merchen raises one important issue, for consideration by all developers and researchers. We invite readers' comments and hope there will be discussion of this topic in our Letters to the Editor section.

Reference

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Samples of Blissymbol Translations

LABEL

(from *It Looked Like Spilt Milk* by Charles G. Shaw, published by Harper and Row).



bird



rabbit

PICTURE DESCRIPTION

(from *Sizes* by Jan Pienkowski, published by Heineman, London)



big lady



little boy

SENTENCE

(from *The School* by John Burningham, published by Jonathan Cape Ltd., London)



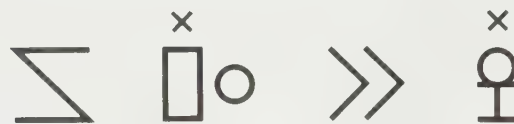
I go to school .



I learn to read .

Watch the next issue of *Communicating Together* for availability and cost of *Hamilton-Wentworth Blissymbol Narratives for Children's Story Books*.

Hamilton-Wentworth Blissymbol Narratives for Children's Story Books



Soon now, the work begun by the Hamilton-Wentworth Collective in 1979 will be available to Blissymbol communicators. The typesetting is underway and the layout has been planned. Parents, instructors and children can begin to look forward to sharing times together with Blissymbol Story Books.

The stories have been translated in three different ways: labels, picture descriptions and sentences.

The *label* translation provides one symbol or a symbol with descriptor for each page of the story.

The *picture description* gives simple sentences or phrases that expand upon the information of the label translation, but remain short and concise.

The *sentences* present a full symbol translation for the text on each page.

The Hamilton-Wentworth Blissymbol Narratives for Children's Story Books offer a fun pre-reading experience for Blissymbol communicators. As the book is read to them, they can identify familiar Blissymbols on the pages, feel a sense of ownership as they see their system included in stories they enjoy and develop an awareness of the relationship between symbols on their communication board and symbols they read in books. Hopefully also, there will be lots of Blissymbol conversation as the book is enjoyed together.

The first books for which translations will be available are about animals, concepts and activities young children enjoy. They have been selected because of their interesting subject content and their pleasing illustrations.

Instructions will accompany the set of translations. The task is one of cutting and pasting the appropriate Blissymbol translations onto the appropriate pages of the story.

We hope this will be the beginning of many sets of Blissymbol translations, typeset by and available from Blissymbolics Communication International. □

Blissymbolics is a meaning-based, augmentative communication system offering vocabulary, structure and strategies to stimulate communication and cognitive development. It can benefit persons of all age and intellectual levels who have the potential and opportunity for interactive, functional communication. Blissymbolics can be used independently, with a variety of picture systems and technologies, or as a complement to words and spelling.

Blissymbols used herein are derived from the symbols described in the work *Semantography*, original copyright © C. K. Bliss, 1949.

September 1982, C. K. Bliss granted an exclusive, non-cancellable and perpetual, world-wide license to the Blissymbolics Communication Institute, for the application of Blissymbols, for use by handicapped persons and persons having communication, language and learning difficulties.

The symbol composition and drawings appearing in articles are in accordance with *Blissymbols for Use*, compiled and edited by Barbara Hehner, and published by the Blissymbolics Communication Institute, Toronto, 1980.

This delicate poem written by Miss Francesca Heller Vanicher from Milan, Italy was presented by Dr. Aurelia Rivarola at the Fourth International ISAAC (International Society for Augmentative and Alternative Communication) Conference held in Cardiff, Wales in September 1986

Sky pink over me
when the sun goes to sleep.
Garden full of flowers.
Little girls play on the grass,
play among the flowers.
I see sweetness in you.
I feel freedom and peace.

I have within me
the blue of the sea.
I have within me
the yellow of the sun,
the green of the grass.

I drink happiness.
I hear the music
of the sky, of the sun,
of the grass, of the water,
of the earth, of the fire,
of the birds which fly in the sky.
And a little girl all in pink
sleeps under a tree, endlessly spreading.

— ∅ ∅ † — 1₁
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Cielo rosa sopra di me
quando il sole va a dormire.
Giardino pieno di fiori.
Bambine giocano sull' erba
giocano fra i fiori.
Io vedo dolcezza in voi.
Io sento libertà e pace.

Io ho dentro di me
l'azzurro del mare.
Io ho dentro di me
il giallo del sole,
il verde dell' erba.

Io bevo felicità.
Io ascolto la musica
del cielo, del sole,
dell' erba, dell' acqua,
della terra, del fuoco,
delgi uccelli che volano nel cielo.
E una bambina tutta rosa
dorme sotto un albero infinito.

THE PARAPHRASE

CATHY FAIRLEY

The Paraphrase is written for those who are nonspeaking and who are moving into traditional orthography. It offers an independent reading opportunity for the growing reader. Many words in this paraphrase are difficult for beginning readers. But these words are also important to learn. This Paraphrase is written by Cathy Fairley, Consultant, Easter Seal Communication Institute.

Technology for the Disabled

Gary Zemlak works in a new and special area — technology.

Gary helps the disabled find special devices. He helps them use toys, telephones, computers and other equipment too.

Gary grew up on a farm in Saskatchewan. He learned to fix things like tractors and cars. Now he fixes devices. Gary says that simple devices are sometimes the best.

He has over 250 clients. One of his clients can now use a telephone alone. The first person he called was his wife. She was so excited that she cried.

He likes to work one-to-one with his clients. "I go out there and make my client as independent as possible", says Gary.



Gary Zemlak demonstrates equipment to a client.

To Readers of Paraphrase

The original story about Gary Zemlak was called "Differently Abled". It was written by Ian Henderson. It appeared in *Communicating Together*, Vol. 4, No. 2, June 1986.

Not Quite According to Plan

BARBARA REID



Barbara Reid joined the Blissymbolics Communication International division of the Easter Seal Communication Institute in January 1987, to co-ordinate the new edition of Blissymbols for Use and to work on the Graphics Data Base. She worked in England as a researcher and lecturer before returning to Canada.

In 1976 I left Canada for a two year stay in England, studying at the Thomas Coram Research Unit (part of the University of London Institute of Education). Nothing went quite according to plan. Instead of carrying out my original intention to do "something on integration", I decided to join in some research on sign language. The questions were intriguing — could nonspeaking mentally handicapped children learn to communicate through sign language? What might this tell us about how they processed information? I went away to read the literature, which in October 1976 amounted to about twenty articles and could be digested in a few evenings. Most of the articles described demonstration studies — we tried system A with client group B and it worked. More controlled studies which sought to identify the salient features of both clients and systems, and to explain the process of non-vocal communication, were yet to come. What we now call the field of augmentative communication was just taking shape.

Now back in Canada (after ten years rather than two), I am grateful for this opportunity to reflect on the time in the U.K. Most of the work which I will describe took place between 1977 and 1984. During that time our communication team had a nucleus of four: Chris Kiernan, Dermot Bowler, Linda Jones and myself. There were usually two streams of work proceeding simultaneously, but with their boundaries often blurred: "basic" or experimental research about learning and memory processes, and more "applied" work such as surveys and training courses. This allowed us to bridge the academic and applied elements within augmentative communication, and was a valuable aspect of our development as researchers.

Initial Growth Led by Practitioners

The growth of augmentative communication in the U.K. was led largely by practitioners — teachers and various therapists looking for solutions to their clients' or students' problems — rather than by governing bodies imposing a curriculum innovation or a new treatment plan. At this time there were three signing systems available: British Sign Language, most accessible in the form of the Makaton Vocabulary; the Paget-Gorman Sign System, a contrived system designed to mirror the English language; and Amerind, a signal system introduced to the U.K. through workshops given by Dr. Madge Skelly. Two symbol systems were also used: Blissymbolics and Rebus symbols. Later Makaton Symbols and Sigsymbols, which featured some unique symbols and some based on the hand shapes of British Sign Language, were added.

Now, we have any number of decision-making matrices and procedures to help us choose the most appropriate system for a given client. Then, people were more interested in choosing a system for a whole school to use, or in a few cases, for all special schools within a county. It was difficult to know

how best to serve the field as researchers. Should we do "contest" research? Try to establish which system was best, or at least best for some groups? We resisted this approach for several reasons. First, the problem is much more complex than it first appears. Even if you decide to concentrate on one client group, say nonspeaking mentally handicapped children with no (identifiable) physical involvement, it is very difficult to isolate the variables involved so that you can be sure it is the systems themselves you are comparing. Are all of your instructors teaching in the same way? Are your groups of children "equivalent" in all important respects? Can the client's communicating partners learn and understand system A as readily as system B? And, perhaps most importantly, does teaching two sets of vocabulary to two "equivalent" groups of children constitute a valid comparison of two systems? It is important to keep in mind that most systems are designed to be more than a set of vocabulary items.

So instead of setting up contests between systems, we approached the problem from two levels. At the level of the individual user, and working with signs, we tried to identify the hand-shapes most easily learned and remembered. Then we analysed existing systems in terms of these handshapes. Again, this gives us only one part of the answer to 'which system is best', and this information must be used in the context of some of the other questions mentioned above. The information can also allow practitioners to choose initial vocabulary within a system which is least likely to frustrate the learner, or to make temporary or permanent modifications to signs to accommodate sign articulation problems. We also used this information as a basis for the Sign Imitation Test, designed to identify potential problem areas for a student about to learn a sign system. Most of this work was carried out by Dermot Bowler and Chris Kiernan, and funded by the Medical Research Council.

The second and more general

level of approach never received funding or official recognition, although feedback from practitioners suggested that it made a very important contribution to the field. We decided to reflect questions about choice of system back to practitioners, to see how various people across the country were making their decisions. Schools were the most accessible units to survey, as a well-organized year-book was available. We excluded schools for the deaf and hard of hearing, but included all other special schools and units which might have nonspeaking students; over 800 schools in all.

By 1982 Augmentative Communication Covered the Map

As the first survey results came back in 1978, we stuck coloured pins in a map of Britain to show the use and spread of systems. By the time the fourth survey was completed in 1982, we had given up on coloured pins, as the map was virtually saturated with augmentative communication. For example, nearly 80% of schools for physically handicapped children and over 90% of schools for severely mentally handicapped children were using some formal augmentative system. In the intervening years, we had seen the patterns of system use grow and change. At first, sign-

ing systems had been fairly mixed across client groups, but by 1982 this had changed to a fairly clear-cut division. British Sign Language in the form of the Makaton Vocabulary predominated amongst mentally handicapped clients, while the Paget Gorman Sign System was favoured for aphasic students. The situation was different for symbol systems. Blissymbolics, originally concentrated in schools for physically handicapped children, had also become more popular than the Rebus system in mentally handicapped schools. There was also a trend toward the use of more than one system per school, usually sign and symbols. Clearly, practitioners were finding their own answers to the question "which system is best for my clients?"

At about the time when the case for augmentative systems had been won on a school by school basis, it began to show signs of losing ground at the level of the individual student. Schools had recognized the need, acquired relevant training in a system, and started teaching children, but were beginning to be disappointed with long-term results. New questions were posed, such as "she knows fifty signs — how can I get her to use them?" and "why doesn't he use his symbols at home?"

One of our basic research responses involved identifying the best communication medium (word, sign or symbol) for a given child. In earlier

projects, we had spotted some children who seemed to have very specific strengths and weaknesses. But when we turned our full attention to this problem, we couldn't find enough of these "specific modality" children to generate appropriately sized groups for research. While modality was clearly an important consideration for a small number of children, it was unlikely to provide a solution in every case. A second set of findings offered a more likely approach. Both in the basic research which I have already described and in developing an assessment tool for pre-verbal clients, we found a difference between non-communicators and communicators (children who would try to communicate by any means available, be it pointing to objects or pictures, gesturing or making noises). This suggested that the problem with unsuccessful clients lay not with the wrong choice of system, but with the development of communication strategies. In learning her fifty signs, the child had probably learned only one communication function — to label a picture card with a sign which the teacher already knew. Generalization of the child's use of the sign to other functions, such as asking for something, and to other situations, such as being at home with mother, might have to become specific steps in his or her program.

From the leading edge of the nonspeech communication movement

AAC: AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

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Foundations of Communication and Language

We did not do much further research on this question, because there was already a rich source of theory and data in the field of child language development. Over the years, the focus of child language theory had moved from a consideration of syntax (the form of language) to semantics (the meaning of language) and finally to pragmatics (the function of language). Information about the nature of language functions such as requesting an object, greeting people or protesting could be applied to the development of communication skills by nonspeaking people. We decided to translate some of this theory into assessment and programming suggestions. We added brief introductions to non-vocal systems, speech production and vocabulary selection and eventually

called it the Focal Course (Foundations of Communication and Language). The course involves eight weekly sessions divided between theory and practice. In the practice sessions, a tutor guides participants through assessments and programming for one or two clients.

Again, while the more basic research we were doing at this time had been supported by grants from the Department of Health and Social Security, government funding was not available for Focal until the course itself became part of a Department of Education and Science project to evaluate in-service training packages. This took place at the University of Manchester from 1984 to 1986 and brought new people and fresh ideas to the program. Several assessment and programming protocols have been added, and the course will soon be available as a self-contained manual.

Our research team broke up in 1984, when it was time for all of us to move on. Chris Kiernan was able to continue some of our work at the University of Manchester, where he became Director of the Hester Adrian Research Centre. In the U.K. as in North America, augmentative communication continues to expand, with the further development of some of the systems and more wide-spread use of electronic communication aids.

It has been very interesting to reflect on our work from a distance of time and space. We tried to contribute to practice, while filling in some of the wide gaps in basic research and theory which still exist within augmentative communication. When the work was in progress, it didn't feel quite so organized and responsive to the needs of the field. Indeed, Dermot Bowler and I spent many days gathering data in corners of school corridors sensing that our "basic" research was not really understood and appreciated by practitioners. Without the kind of perspective hindsight provides, it was difficult to explain the links between our efforts and the practical answers teachers were seeking.

Although it has been very personal, I hope that this account has shown how research and practice can interact, and perhaps helped practitioners to understand some of the things which influence researchers' decisions about what work to

do. The policy of funding bodies is often a strong determining factor in these decisions, so I have touched on that as well. I have left out much of the detail, some of the projects, and most of the disappointments, including a PhD thesis which got so far down the list of priorities it died of neglect. As I mentioned earlier, nothing went quite according to plan.□

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A Visit to a Total Communication Class

CLAUDIA WOOD

Last spring Claudia Wood, BCI Symbol System Coordinator, visited the Total Communication Class of Mrs. Joan Tressel at Lisgar School which is operated by the Hamilton-Wentworth Board of Education. Mrs. Wood, a former teacher, was impressed by what she saw and wrote the following account of her visit.

Lisgar School in Hamilton, Ontario is home to a special Total Communication Class within the regular elementary school. On entering the classroom, one is immediately aware of the warm and friendly atmosphere in this exceptional class of language delayed, mobile children who use signs, Blissymbols, some rebus pictures and traditional orthography throughout their school day. There were nine children playing with each other in various corners of the room. One child spends an hour each morning in this class, three younger children spend the entire morning and five stay all day.

At nine o'clock Mrs. Tressel gained the attention of everyone by playing a music box, her signal that the children should give her their attention. As the children lined up, she reinforced their receptive language skills by signing and saying such things as "George is at the front of the line, and Pedro is at the back of the line."

The children joined the regular kindergarten class for an integrated gym period. This is an opportunity for integration with other children in the school. Mrs. Tressel has taught sign language to most of the children in the school to encourage interaction.

Both teachers did an admirable job of encouraging the children to interact with each other. Mrs. Tressel habitually signed all instructions to her class while the other teacher spoke. The teacher asked Mrs. Tressel's children to choose a friend in the kindergarten class by going and sitting next to

him/her. Pairs of children positioned themselves around the gym as the teachers demonstrated frisbee throwing to the amusement of their onlookers. Mrs. Tressel signed her intention to watch carefully and be ready to catch the frisbee as the other threw her the frisbee. Predictably she was unable to catch the frisbee which tickled all the children. Mrs. Tressel then signed the way she would hold the frisbee in order to throw it back and successfully caught the frisbee on the second return. All the children clapped.

Children played catch with the frisbee themselves while the two teachers circulated throughout the gym and gave individual attention as necessary. Mrs. Tressel signed instructions to children who seemed confused by the directions or lacked the motor skills to throw successfully to their partner.

The teachers posed problems for the children to solve through their use of language. Four team captains were chosen and the remaining children were instructed to make four lines that were the same length. Predictably the lines were long and short and students had to use one-to-one correspondence to even them.

After gym, the students returned

to their class to resume the morning routine. They took turns looking out the window and signing their impressions of the weather. Symbols, signs and words were used to determine the day, month and atmospheric conditions. The teacher sang an impromptu song and all the children joined her in singing and signing.

Dinosaurs were the focus for the main lesson. All had collaborated in painting a huge (six foot tall) dinosaur the day before. *Thunder*, modelled after the main character in a favourite series of books, was dramatically pinned to the bulletin board in such a way that he almost touched the ceiling. Children proudly read the story about *Thunder* which they had written together in symbols and words on large chart paper. The teacher had devised an amusing embellished Blissymbol which looked unmistakably like *Thunder!* The children discussed the difference between real dinosaurs which lived a long time ago and the fictional character. Mrs. Tressel read a *Thunder* story and signed the main ideas from each page.

A discussion about big and small ensued, and *Thunder* was measured with the meter stick and deemed to be very large indeed. Each child received a model dinosaur and was



Mrs. Tressel reads and signs a story to the class.

told to measure it and build a house big enough to hold his dinosaur. Measuring consisted of holding a dinosaur up to the measuring stick and looking for a block which was taller. This task reinforced the theme of the story the children had just heard.

Family Support for the Program

While her students were at recess, Mrs. Tressel showed us some of the children's workbooks and news books and commented on the acceptance by most parents of this very unique method of teaching. All children but one in the class have been assessed by a psychologist as possessing normal intelligence and severe language delays. To support Mrs. Tressel's program, many parents have taken a signing class. They reinforce the learning of Blissymbols and signs through responding to items written by the teacher in the news book each day. A resource teacher visits the class regularly to help the teacher prepare worksheets and reading materials in symbols and signs. She also does short lessons enabling the teacher and her assistant to observe the students interacting and communicating with another teacher.

Seatwork commenced after recess during which each student received a paper with a lesson geared to his ability level. Some read symbol sentences and found the pictures which matched. Others wrote symbol sentences incorporating a given symbol and wrote the words underneath the symbols. One boy traced the words and another wrote them from memory. One student independently referred to his communication board to copy the spelling of a difficult word. The teaching assistant worked with a group of three younger children and a volunteer sprawled comfortably on the floor with two others. It was obvious that each child was engrossed in the given task. Mrs. Tressel began collaborating with one child on the news that would go in his news book. They communicated by means of signs and symbols and composed the entry together. Everyone gathered in a circle for "show and tell" and the goodbye song before the three youngest children went off to their taxis. Older children shared their news through signs and symbols and the teacher acted as scribe. After everyone had a turn, students took

turns reading someone else's news.

I left the class having thoroughly enjoyed and appreciated my visit. The teacher has succeeded in creating a stimulating learning environment for students, staff and even parents (through newsletters and signing classes). Communication in all its forms is an integral part of every group or individual activity. The students were obviously enjoying interacting and learning together. □

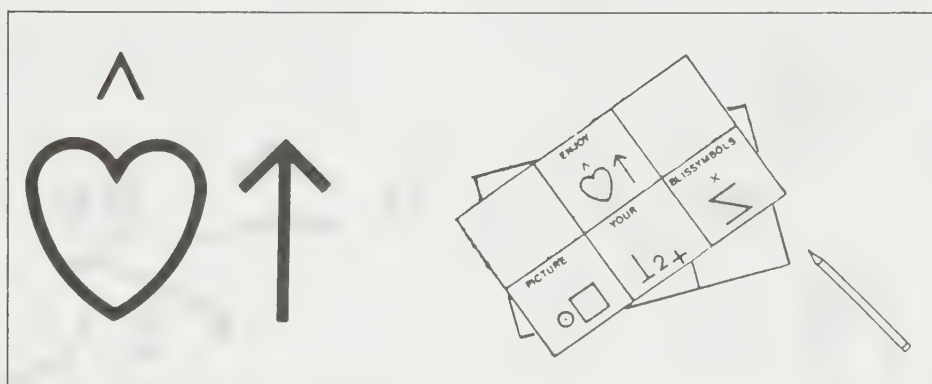
Community Action and Awareness (CAA) Announces Conference Award

The CAA will provide an Ontario augmentative communicator with funds to cover expenses and those of an attendant to attend the Fifth International Conference on Augmentative and Alternative Communication to be sponsored by ISAAC at Anaheim, California in October 1988.

For full criteria and details of applying for this award contact: CAA, 46 Captain Rolph Blvd., Markham, Ontario, L3P 2P8.

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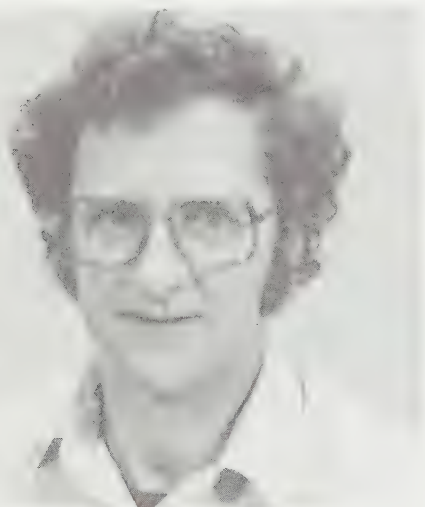
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Mobility and Employment, A Report on Two Conferences

GEB VERBURG



"Research and Publications" is written by Geb Verburg, who has been involved in the field of nonspeech communication since the mid-seventies. A cognitive scientist, Mr. Verburg is currently working as Research Assistant in several projects at the Hugh MacMillan Medical Centre.

I would like to report briefly on a conference on "Childhood Powered Mobility" that I attended in March, 1987 and review the proceedings of a conference on "The Future of Work for the Disabled" held in March, 1986. Issues raised at these two conferences re-emphasize the need for a wholistic approach and allow me to refresh a point made in an earlier issue.

Both topics, mobility and employment, may appear somewhat out of place in a magazine that is dedicated to communication. Yet both have multiple and interesting links to communication as we will see.

Childhood Mobility

A number of interesting findings were presented at the Childhood Powered Mobility Conference. Research carried out with infants who could or could not yet walk

showed that there are significant differences between 'walkers' and 'non-walkers' (that is 'not-yet-walkers'). Walkers were significantly better at three tasks: one that measured orientation in space; another that measured depth perception; a final surprising difference existed in the performance of an object permanence task in which the children were to find hidden objects. In all these tasks, children who were able to walk did significantly better than children who did not yet walk. This difference may of course be attributed to the fact that children who walk are more mature or ahead in other ways, allowing them to perform better on the tests. However, results from a case study presented at the conference would appear to indicate that maturation was not the only factor. This case study followed a child for whom the onset of walking was delayed by an accident that necessitated a long term body-cast. The child could not walk before the cast was applied and wore the cast during the period when he would normally have started to walk. If we assume that development and maturation, other than that related to ambulation continued during convalescence, then this child's level of maturation was equal to that of his walking peers. Just before the removal of the cast the child was tested with the hidden object and orientation in space tasks. His level of performance was like that of the non-walking infants. When the cast was removed the child started to walk almost immediately and within two weeks had acquired object permanence, orientation in space and depth perception. These results are only based on one case but they would suggest that there appears to be a relation between independent mobility and certain cognitive skills. Do these results apply to children who are physically disabled? Or do they only apply to able-bodied infants?

Research carried out at HMMC, with four to nine year-old students, both disabled and able-bodied, shows that between these two subject groups, there are highly significant

differences in scores on standard tests of spatial skills. More disconcerting is the fact that the differences between students who are disabled and those who are not disabled increase with age (at least in our subject sample; $n=24$ and $n=33$). Thus, where able-bodied students score near or above the norm for a test, students who are disabled score below the norm and the gap between the scores of the two groups increases with age. Ignoring for the moment the inappropriate norming of tests or the inappropriateness of standard tests for disabled students, these results contain suggestions of several messages. One, we do not yet know which and/or how many skills are lacking or lagging coincidental with a disability. Secondly, if students who are disabled differ as much as I am now inclined to believe, then we should be careful in applying to disabled students, information from results obtained in studies on the effects of variables of graphic communication systems, that use only able-bodied students. We may be building an empire of statistics that apply mostly (only) to students who will never use graphic communication systems. Thirdly, it would be interesting to establish whether graphic communication systems can or do foster spatial skills.

The Future of Work for Disabled People

This symposium was organized jointly by the American Foundation for the Blind and The President's Committee on Employment of the Handicapped. It brought together scientists, engineers, educators, economists, labour leaders and social scientists. The majority of those presenting were experts in fields other than rehabilitation which gives these proceedings added value as a sample of views held outside our field.

Senator Robert Dole stated, in a foreword, that: "here, in one package, is a projection of what it will take to prepare for the education, training, and placement needs of handicapped individuals". And

while I think that this may be somewhat of an overstatement, the proceedings do raise points that we should consider, well before a disabled person reaches the stage of entrance into the workforce. These points without elaboration are:

- the changing nature of work and the workforce;
- multiple career changes with demands for retraining;
- the increasing demands on literacy associated with a shift from manufacturing jobs to service and knowledge/information-based jobs;
- the longstanding, long-fought and yet to be won fight for an attitude of acceptance of disabled workers;
- the potential of technology and the need to adapt jobs and work environments to people rather than the reverse.

I would like to share some quotes that I found particularly significant. "You can't count on good will" (p.97). I don't think that many disabled people do or want to do so. This quote is more for those service providers who believe that they are in the good will business, but are not. A strong statement, but a necessary one.

"The only way that the handicapped have any hope for the future is to organize, propagandize, and keep their legislator's and bureaucrats' feet in the fire" (p.96). The need to organize and especially to co-operate seems to be particularly urgent for the organizations that work with

people with different types of impairments.

"There are limited opportunities in preparing for equity positions. The big opportunities have to lie in preparing yourself for mainstream work. That's where the better future must lie for them, and the best future for our society" (p.97). Like mobility, employment and assessment, planning, and training for employment should be started as early as possible. If we want people who are disabled to be able to compete for mainstream jobs they must get every possible edge. An adapted workstation and welcoming attitude is a minimal requirement. Literacy, that is communication ability and language skills as well as literacy with technology, its applications and potentials, is an essential requirement.

I want to make an observation and express a warning. There has been a tendency to put great store in computer related jobs as offering (future) work opportunities for people who are disabled. There lies a danger here. Research on expert and novice programmers and computer scientists has found that people performing best at these skills have a high level of spatial skills. As I discussed earlier these skills are not among the strongest skills of people who are physically disabled. By directing students who are disabled into computer programming-related jobs, we may be inadvertently cre-

ating a mismatch between required and available skills. I do not mean to disqualify the computer as a tool of great value for disabled persons but we should be aware of and then assess and train the required skills.

I close with a long quote from Wassily Leontief who very eloquently makes a point that I tried to make in an earlier issue. "In redefining the ways in which we differentiate between work and leisure, in planning new models for income distribution no longer solely linked to economic contribution, and primarily, in re-assessing the ways in which we evaluate social contribution, our society must speak fully and freely to one another in the coming years if we are not to become a handicapped society, lumbered with a recipe for disaster instead of one for social development. And you, as a person with direct knowledge of and hopes from the new technology, have perhaps more to contribute to this dialogue than any other group in our society" (p.24).□

Reference

- *The Future of Work for Disabled People: Employment and the New Technology*. Proceedings of conference; Washington, March, 1986. New York, NY: American Foundation for the Blind/United States. President's Committee on Employment of the Handicapped. ISBN 0-89128-141-X.
- Verburg, G. "Autonomy, Independence and Integration: To What Ends?" *Communicating Together* Volume 2, No. 3, September 1984.

COMMUNICATION OUTLOOK

Focusing on Communication Aids and Techniques

A Publication of the International Society for
Augmentative and Alternative Communication (ISAAC)

Communication Outlook is an international quarterly which provides a forum for individuals interested in the application of techniques and aids for people who experience communication handicaps. It is a cross-disciplinary information source as well as a reference for those wishing to contact others working in the field of communication enhancement.

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For subscription information, contact *Communication Outlook*, Artificial Language Laboratory, 405 Computer Center, Michigan State University, East Lansing, Michigan 48824-1042, (517) 353-0870.

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SCHEDULE OF EVENTS

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The Easter Seal Communication Institute (ESCI) holds a series of one-day seminars throughout the year on a variety of topics related to the application of augmentative communication. Seminar topics include:

- Orientation for Educators with an Augmentative Communicator in the Class, June 10
- Blissymbols and Technology, August 20
- Commercially Available Graphics for Augmentative Communicators, August 21
- Programming with an Augmentative Communicator in the Class, September 17
- Language Arts and Augmentative Communication, October 6
- Classroom Dynamics with Augmentative Communicators, October 7
- Student Interaction with Augmentative Communicators, November 4
- Curriculum Adaptations for Augmentative Communicators, November 5
- Reading through Blissymbolics, November 23, 24
- Practicum to Blissymbolics Independent Study Program, October 5, and November 6

Contact: Training Co-ordinator, Easter Seal Communication Institute, 24 Ferrand Drive, Don Mills, Ontario. M3C 3N2.

Telephone: (416) 421-8377

Southeast Augmentative Communication Conference

In Birmingham, Alabama

- October 9, 10, 1987
- Guest Speaker Dr. David Beukelman

Contact: Sharon Crain, Southeast Augmentative Communication Conference, United Cerebral Palsy of Greater Birmingham, Inc. 2430 11th Avenue North, Birmingham, AL 35234, USA.

Blissymbolics Elementary Workshop

In Toronto, Ontario

- August 17-19, 1987

Reading through Blissymbolics

In Toronto, Ontario

- November 23, 24

Day One: Reading through Blissymbolics — a Structural Approach
Guest Speakers: Gloria Sorkin, Jackie Saretsky

Day Two: Reading — the Transition from Blissymbolics to Print

Contact: Training Co-ordinator, Easter Seal Communication Institute, 24 Ferrand Drive, Don Mills, Ontario M3C 3N2
Telephone: (416) 421-8377

ISAAC Regional Conferences

In Strausburg, Pennsylvania

- August 14-16, 1987
- "*Augmentative Communication Retreat*"

Guest Speakers include: Bruce Baker, John Costello, Sheela Stuart, Anne Warrick and Kathryn Yorkston.

Contact: Colleen Haney, Pennsylvania, Assistive Devices Center, Elizabethtown Hospital, Elizabethtown, PA 17022 USA.
Telephone: (717) 367-1161 ext. 104.

In Lafayette, Indiana

- August 17-19, 1987

Augmentative and Alternative Communication: State of the Art and Science 1987. The conference will include presentations by internationally known leaders in the field on topics including service delivery, technology, assessment and intervention strategies.

Contact: Dr. Lyle Lloyd or Dr. George Karlan, Purdue University, South Campus Courts, Bldg. E., West Lafayette IN 7907 USA.

Purdue University Courses

In Lafayette, Indiana

- June 8-19, 1987

Communication Intervention with the Severely Handicapped. This course focuses on the process of planning and implementing communication intervention in educational settings with severely handicapped individuals. Three credits.

- July 27-August 7, 1987

• *Nonspeech Communication* for those with little experience in augmentative communication. The course includes a critical analysis of aided and unaided nonspeech symbols and systems used with a variety of disabled people. Three credits.

Contact: Dr. Lyle Lloyd or Dr. George Karlan, Purdue University, South Campus Courts, Bldg. E., West Lafayette IN 47907 USA.

About the Publisher

The Easter Seal Communication Institute (formerly the Blissymbolics Communication Institute, established in 1975) has worked since its inception toward enhancing the lives of nonspeaking people. In its early years the Institute's primary focus was the development and application of Blissymbolics as an augmentative communication system around the world. This role continues but within a broader mandate that reflects the philosophy and perspective of its professional staff.

ESCI supports effective communication by nonspeaking people through:

- (1) advancing augmentative communication techniques and strategies that contribute to cognitive, social and emotional growth;
- (2) drawing attention to the quality of the learning experience and identifying those types of augmentative communication instruction that contribute to cognitive, social and emotional growth;
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